Indiana Family and Social Services Administration

Bureau of Rehabilitation Services

Employment Services Model Evaluation - Quarterly Findings Report

February 2017

PCG | Human Services
Public Focus. Proven Results.™

TABLE OF CONTENTS

I. PURPOSE

The overall purpose of this effort is to provide the Indiana Bureau of Rehabilitation Services (BRS) an examination and analysis of the state's Vocational Rehabilitation (VR) Employment Services Model (ESM). Specifically, BRS seeks to understand whether ESM, which was only recently implemented on July 1, 2015, is having a positive impact on service delivery and if it is achieving key programmatic goals.

This report is one installment in a series of program evaluation reports to be produced quarterly by Public Consulting Group in partnership with BRS. Each report will analyze elements of ESM and address programmatic questions such as:

- What elements of service delivery lead to positive employment outcomes?
- Are there differences across certain populations that can be identified in order to better inform policy and practice?
- Are services being individualized to best suit the needs and strengths of each consumer?

The purpose of these Quarterly Reports is to measure and analyze a broad range of VR statistics, including hourly wages, weekly hours worked, and successful case closure rate, among others. Also included in this analysis is baseline information related to the Results-Based Funding model, ESM's predecessor. Although few conclusions can be drawn at this time due to the fact that ESM is still in its infancy, the data results presented in the following sections provide BRS with a foundation of knowledge on which to build upon in the coming months and years.

II. BACKGROUND

As of 2010, nearly 19% of Americans live with a disability[1]. At 11.1%, individuals with disabilities have disproportionately high rates of unemployment relative to their peers without disabilities[2]. In addition, earned wages are 37% less on average, and in some states, even more, with the pay gap widening as educational attainment increases[3]. The differences in earned income impact not only individuals, but their families which often must support them, as well as the state and federal government that provides support in the form of various benefit programs. Workers with disabilities are more likely to be employed part-time, and largely in the service industries, as well as transportation and production. Individuals with disabilities are likelier to face persistent poverty compared to those without disabilities. Individuals with a disability often face barriers to employment, including mismatches between skill and their job, discrimination, and lack of job readiness. As of July 2016, approximately 20.4% of the workforce are individuals with disabilities[4].

The goal of vocational rehabilitation services is to assist individuals with disabilities in gaining meaningful employment. Vocational rehabilitation programs are funded by federal dollars as well as state dollars through the Rehabilitation Act of 1973. Vocational Rehabilitation works directly with individuals with physical or mental impairments to address the challenges they may face in the modern workplace, through authorizing a wide range of services and supports[5]. These services include job coaching, vocational assessment, training, assessing worksite accommodations, assistive technology, among other services. State vocational rehabilitation programs also assist in job placement of individuals with disabilities by developing relationships with local businesses.

The passage of the Workforce Innovation and Opportunity Act (WIOA) introduced new requirements to how services are offered and how success is measured in vocational rehabilitation services administration and programming. In an effort to create accountability to job seekers and tax payers, WIOA emphasizes performance measures and stresses that agencies make data informed decisions. WIOA creates common performance measures, requires the establishment of primary indicators on attaining skills and credentials, and establishes annual reporting measures[6].

With this context in mind, Indiana BRS is taking the lead in using programmatic data in order to drive policy and promote positive employment outcomes for individuals with disabilities. The recently implemented **Employment Services Model**, described in the following section, was designed based on an in-depth analysis of consumer needs and service delivery gaps. Moving forward, BRS will further leverage data and information to improve services and programs.

TRANSITION TO EMPLOYMENT SERVICES MODEL

In order to understand the full impact that ESM is intended to achieve, it is important to briefly outline the evolution that the BRS Vocational Rehabilitation program has undergone.

Beginning in 2006, BRS shifted away from hourly-units of service to a structured milestone-based system, known as the Results-Based Funding model (RBF). The idea was simple and rooted in the ever-changing VR landscape: tie provider reimbursements to specific “milestones”, or consumer accomplishments, in order to promote comprehensive and effective service delivery. This in turn would lead to positive employment outcomes for individuals with a disability. Additionally, BRS separated the RBF model into two tiers: one intended for individuals

[1] https://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html
[2] https://www.dol.gov/odep/
[3] http://www.air.org/news/press-release/those-disabilities-earn-37-less-average-gap-even-wider-some-states
[4] https://www.dol.gov/odep/
[5] https://www2.ed.gov/policy/speced/reg/narrative.html
[6] http://www2.ed.gov/about/offices/list/osers/rsa/wioa-meetings-on-final-regs.html

with high needs and multiple barriers to employment (Tier 1), and one intended for individuals that would require less intensive services than those in Tier 1 (Tier 2).

While the implementation of the RBF model was a positive step for Indiana's Vocational Rehabilitation program, it did not entirely accomplish BRS' service delivery goals. For instance, an analysis performed by BRS revealed that providers were spending less time with consumers during the initial intake stages. This upfront work allows providers to identify consumer strengths, skillsets, barriers to employment, and career goals, and thus lead to positive employment outcomes.

In July 2015, BRS implemented a new service delivery model for its Vocational Rehabilitation program known as the Employment Services Model (ESM). Commonly referred to as a "hybrid service model" because it contains elements of both the RBF model and hourly units of service, ESM intends to find the balance between service structure and provider flexibility, as well as emphasis on both achievements of outcomes and individualized, high quality services. Furthermore, ESM eliminates the "one size fits all" approach that unintentionally resulted from the milestone-based service structure by allowing providers to tailor their service hours to each individual consumer, based on the unique needs of each individual.

Overall, the purpose of ESM is to:

- Inject flexibility into the service structure;
- Eliminate barriers for individuals with the most significant disabilities to receive appropriate services and supports; and
- Ensure that employment plans are tailored to the unique needs of each consumer served.[7]

The goal of BRS' new model is to re-emphasizes the work at the start of the consumer's journey to employment, referred to in ESM as the "Discovery" phase. There are a number of Discovery services that providers can leverage to better serve their consumers, including Situational Assessment, Work Experiences, and Job Shadowing. Another important goal is to increase access to supported employment services for individuals with the most significant disabilities. Over the coming months and years, BRS will analyze the impact of ESM in order to better inform future policy and practice.

ANALYSIS FRAMEWORK

For clarity, the components outlined below frame the following analysis:

- Consumers are designated as "RBF" or "ESM" based on date of earliest authorization. Consumers whose earliest authorization occurs between July 1, 2006 and June 30, 2016 received the RBF designation. Consumers whose earliest authorization occurs June 30, 2016 received the ESM designation.

- All results are reported based on the number of cases rather than the unique number of consumers. This is a more accurate representation of the RBF model because it captures consumers that have had multiple cases with BRS with different determination attributes. For example, a consumer might have a severity determination of "non-significant disability" for one case, while another case for the same consumer might reflect a severity determination of "significantly disabled".

- In some cases, a consumer might receive multiple job placements before case closure. To ensure accuracy, only the most recent hourly wages and weekly hours received by a consumer are included.

[7] BRS "Indiana Vocational Rehabilitation Services Manual of Employment Services"http://www.in.gov/fssa/files/VR_Manual_of_Employment_Services_June_2015_FINAL.pdf

- Population distributions are categorized based on the primary impairment identified by the VR counselor. The primary impairment categories are as follows: Sensory-Vision, Sensory–Hearing, Physical, Developmental, Mental Illness, and Other. The "Other" category includes individuals who are deaf-blind or with communication barriers.

- Severity determination distributions are based on determinations required for federal reporting purposes. The severity determination categories are as follows:

    - **Non-Significant Disability (NSD)**: Consumer has a physical or mental impairment that results in a substantial impediment to employment.

    - **Significant Disability (SD)**: Consumer has a severe physical or mental impairment that will substantially limit one or two functional capacities (communication, interpersonal skills, mobility, self-care, self-direction, work skills, and work tolerance) in terms of employment outcome and who can be expected to require multiple VR services over an extended period.

    - **Most Significant Disability (MSD)**: Consumer has a severe physical or mental impairment that substantially limits three or more functional capacities and who can be expected to require multiple VR services over an extended period.

- Case closure rates are determined using three different case closure codes. Each code is associated with a specific reason for case closure. Cases can be closed for a variety of reasons, including a consumer leaving the program before completion. The case closure categories are as follows:

    - **Case Closure – IPE Not Implemented:** Consumer receives a comprehensive Individualized Plan for Employment (IPE) but leaves the system prior to receiving VR services.

    - **Case Closure – Not Rehabilitated:** Consumer receives a comprehensive Individualized Plan for Employment but leaves the system prior to achieving employment placement and stabilization.

    - **Successful Case Closure:** Consumer is successfully placed in competitive and integrated employment, has achieved stabilization, and has retained employment for at least 90 days.

- Outliers greater than two standard deviations from the mean were removed from the average hourly wage and average weekly hours worked analyses.

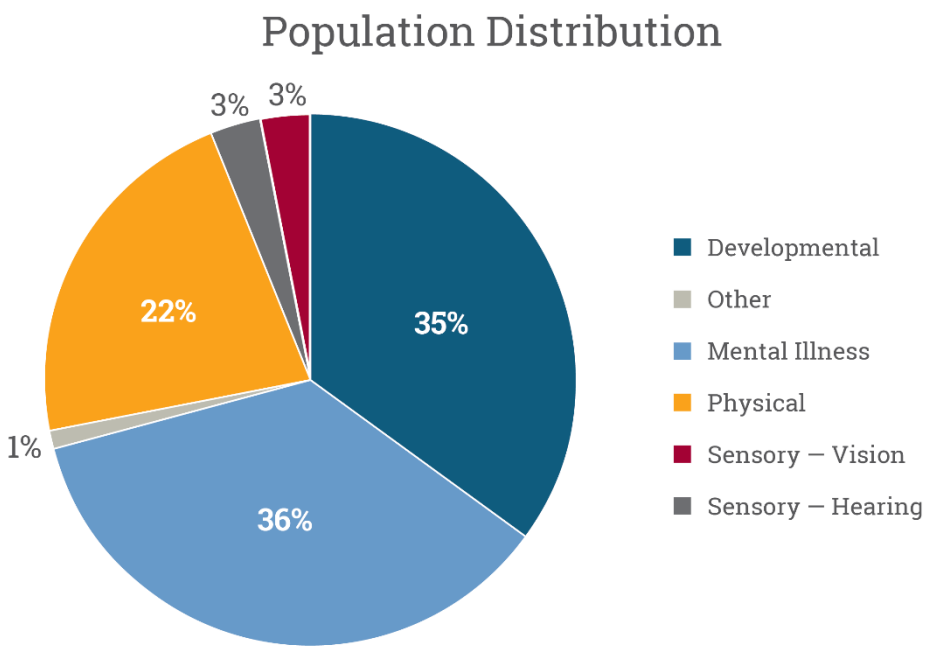
III. RESULTS-BASED FUNDING MODEL

The following data results are for consumers served under the Results-Based Funding model. Consumers that received their first service authorization after July 1, 2006 and before June 30, 2015 are included in these results.

POPULATION DISTRIBUTION

Figure 1 displays the percentage of consumers by primary impairment who had an authorization for a RBF service code. Impairments are categorized as follows, with a code to correspond to the following disability types: Sensory-Vision, Sensory–Hearing, Physical, Developmental, Mental Illness, and Other. The query identified 36,670 cases in total that received at least one RBF authorization. Of those, 36 percent are individuals with Mental Illness, 35 percent are individuals with Development disabilities, 22 percent are individuals with physical disabilities, 3 percent are individuals who have either a Sensory Vision or Sensory Hearing impairment, and one percent are categorized as “Other”.

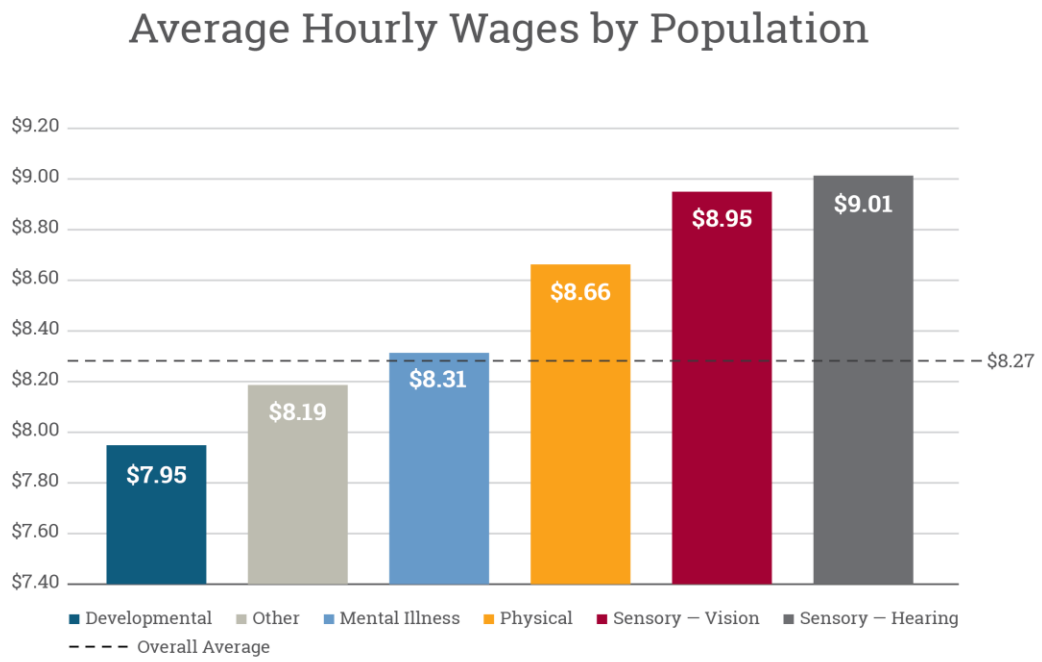
FIGURE 1



AVERAGE HOURLY WAGES

Figure 2 measures the average hourly wage a consumer receives upon achieving employment placement. In some cases, consumers may receive multiple placements within the same case, or with another case. This could be due to a variety of reasons, including that the original placement did not meet their desired employment goals or match their skillset. Consumers that experience this path to stabilization are also captured in this metric.

FIGURE 2



19,285 clients were identified as having received an authorization for at least one RBF service, as well as an hourly wage. Consumers that had multiple cases over time were also taken into account, resulting in a larger number of unique cases. These figures exclude outliers and obvious data entry anomalies. Consumers receive wages once they are placed in employment. The overall average hourly wages earned per placement is $8.27. The population with the highest average wage is Sensory-Hearing at $9.01 and the population with the lowest average hourly wage is Developmental at $7.95. the "Other" population includes individuals with disabling neurological conditions, including stroke, TBI, and communication issues.

FIGURE 3

Average Hourly Wage by Year

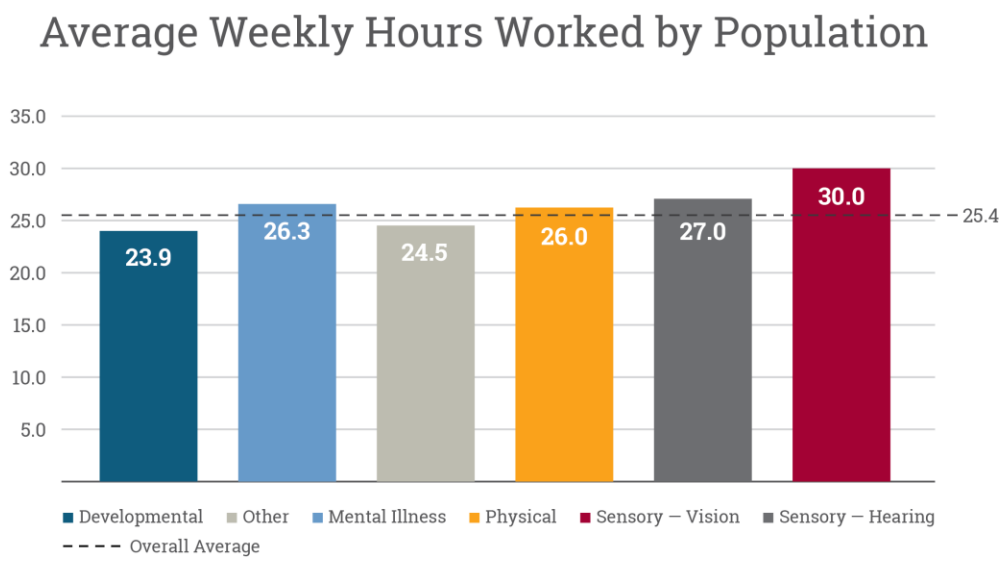
Year	Average Hourly Wage
2006	$7.33
2007	$7.38
2008	$7.63
2009	$8.08
2010	$8.30
2011	$8.39
2012	$8.36
2013	$8.43
2014	$8.43
2015	$8.67
2016	$8.72

Figure 3 displays the same average hourly wage data over the course of a ten-year period from 2006 to 2016. Even though the RBF model was retired on June 30, 2015, most consumers with active cases at the time of the transition continued to be served under the RBF model until they were successfully placed. Thus, their average hourly wages counted towards the RBF results.

AVERAGE WEEKLY HOURS WORKED

Figure 4 on the following page measures the average weekly hours worked by consumers upon achieving employment placement. Some consumers had multiple values for weekly hours worked, which would occur if they achieved employment placement more than once before stabilization. If a consumer received multiple weekly hours worked due to multiple employment placements, it was captured in the data and used in the calculations.

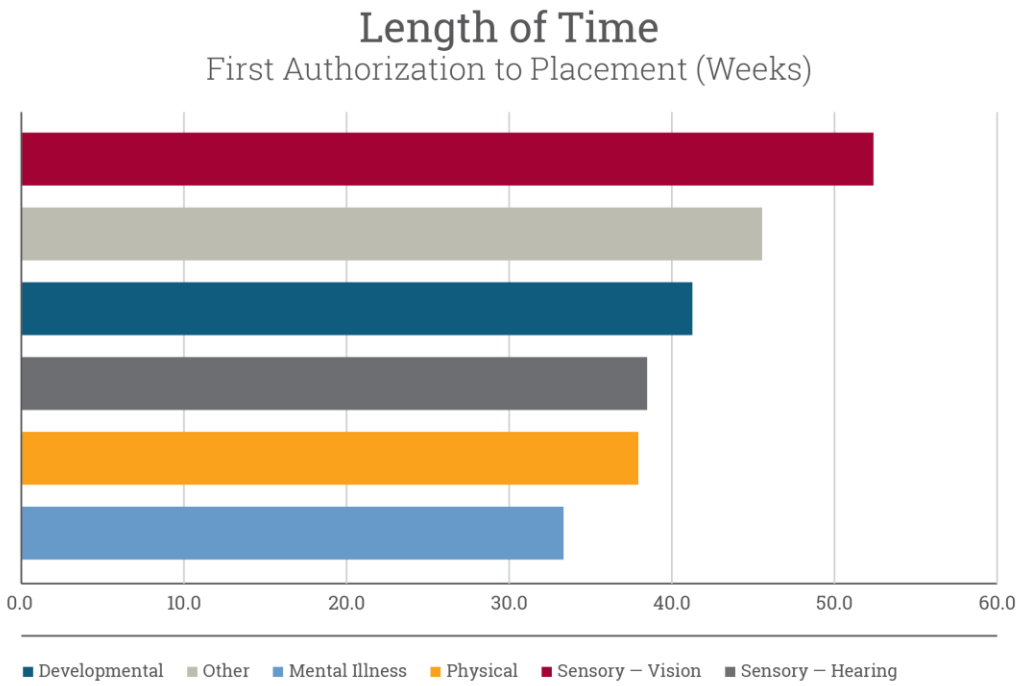
FIGURE 4



LENGTH OF TIME FROM FIRST AUTHORIZATION TO EMPLOYMENT PLACEMENT

Figure 5 displays the average number of weeks of time between a consumer's first authorization for an RBF service to the time they achieved employment placement. Our numbers reflect any changes or updates to the authorizations that may have occurred. As most consumers receive multiple service authorizations during their cases, the date of the earliest authorization was used.

FIGURE 5



The query identified 22,137 cases that achieved placement with at least one RBF service authorization. Outliers were not excluded from this analysis primarily due to the challenges with identifying true outliers due to data entry anomalies. For instance, it is possible for a consumer to achieve a successful placement within one week of receiving services from BRS. In this instance, most likely the consumer already identified employment on their own or had minimal barriers to employment. It was therefore determined to include these records in the query results.

The overall average length of time from the first authorization date to successful placement is 38.3 weeks. The population with the shortest number of weeks to placement are individuals with Mental Illness and the population with the longest number of weeks to placement are individuals with Sensory-Vision impairments.

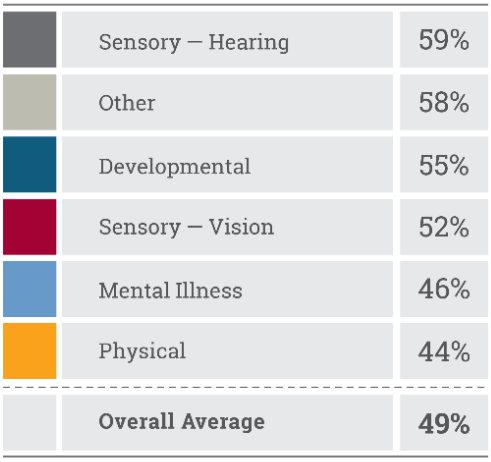
SUCCESSFUL CASE CLOSURE RATE

Figure 6 shows the number of cases in the RBF model that received an employment placement and 90-day stabilization. The case closure rates reflect the proportion of closed cases that received "Successful Case Closure" designation compared to the other non-successful case closure designations.

The successful case closure rates range from 44% (Physical) to 59% percent (Sensory – Hearing). The overall case closure rate for RBF consumers is 49%.

FIGURE 1

Case Closure Rate by Population



SEVERITY OF DISABILITY

The following table displays a number of metrics based on severity determination, including percent of population, average hourly wages, and average weekly hours worked. Consumers identified as not having a significant disability achieved the highest average hourly wages ($8.87) and weekly hours worked (31.7 hours) but only represent 2% of the population. Those identified as having the most significant disabilities, which represents over half of the population, achieved the lowest average hourly wages ($7.87) and weekly hours worked (23.6).

FIGURE 2

Severity of Disability	Percent of Population*	Average Hourly Wages	Average Weekly Hours Worked
Non-Significant Disability	2 %	$ 8.87	31.7
Significant Disability	41 %	$ 8.58	28.5
Most Significant Disability	57 %	$ 7.97	23.6

*Based on number of unique cases.

IV. EMPLOYMENT SERVICES MODEL

On July 1, 2015 BRS fully implemented the Employment Services Model. The following data results are for individuals that received their first service authorization on or after the date of July 1, 2015. Therefore, any unique cases that have an authorization that is on or before June 30, 2015, are not included in the data used to perform the analysis in this section.

POPULATION DISTRIBUTION

Figure 8 displays the distribution of consumers by primary impairment. There are 5,071 unique consumer cases served under ESM. Of those cases, most consumers are individuals with developmental disabilities, at 37% of unique consumer cases. Individuals with Mental Illness are the second largest population served under ESM at 35%. The least number of unique cases are for consumers with a disability that is categorized as Other.

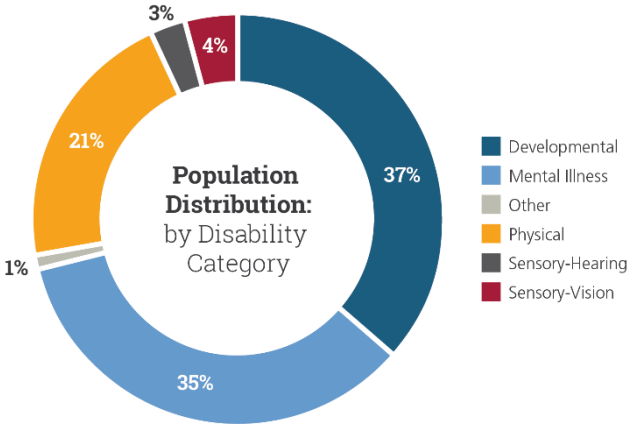


FIGURE 8

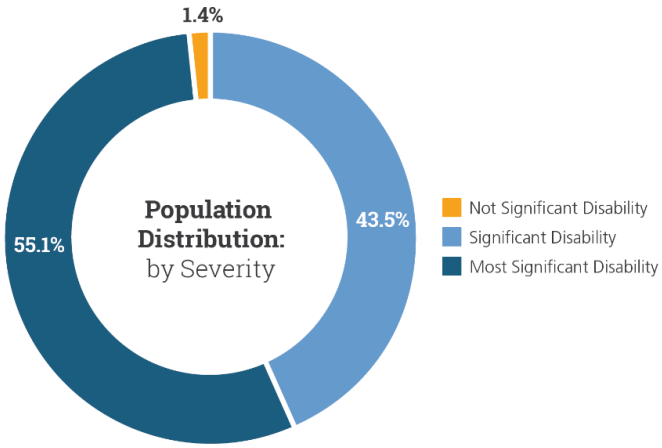


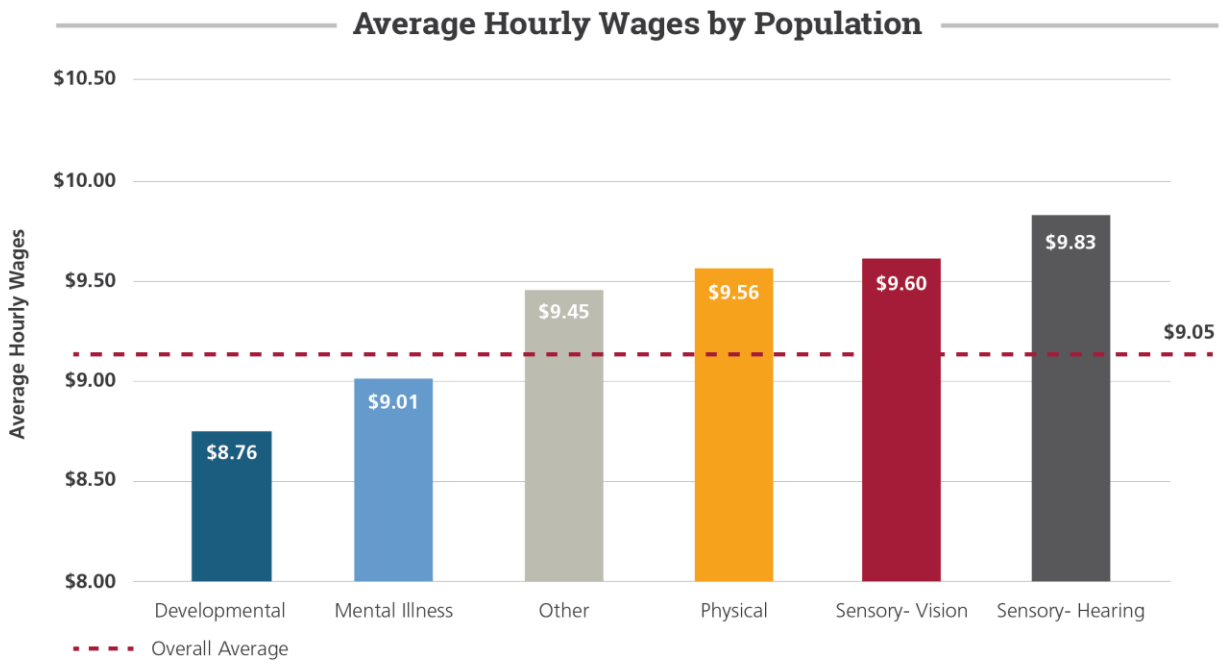
FIGURE 9

Figure 9 displays the consumer population by severity of disability. Individuals with the most significant disabilities represents 55.1% of the unique cases. The fewest cases involve consumers with a disability that is categorized as not significant.

HOURLY WAGES

Figure 10 on the following page measures, by population, the average hourly wages ESM consumers received upon achieving employment placement. 1,435 unique cases were identified as receiving an hourly wage, and the overall average hourly wage is $9.05. The population that received the highest average hourly wage is Sensory-Hearing, at $9.83, followed by Sensory-Vision at $9.60. The population with the lowest average hourly wage is individuals with developmental disabilities, at $8.76.

FIGURE 10



These results are similar to those in the November 2016 report, which also reflected the highest wages for Sensory-Hearing cases and the lowest for cases where the primary impairment is developmental disability. Most of the wages went up by an average of $0.13, including the average, by $0.05. The Other and Sensory-Hearing populations decreased by $0.06 and $0.25 respectively.

The average hourly wages are further categorized in **Figure 11** by severity category. Consumers in the not significant disability categorization received the highest wages, at $9.81, while consumers with the most significant disabilities had the lowest wages at $8.69. This data is consistent with our findings in past reports, where consumers with less severe disabilities have on average higher wages than their peers with the most severe disabilities.

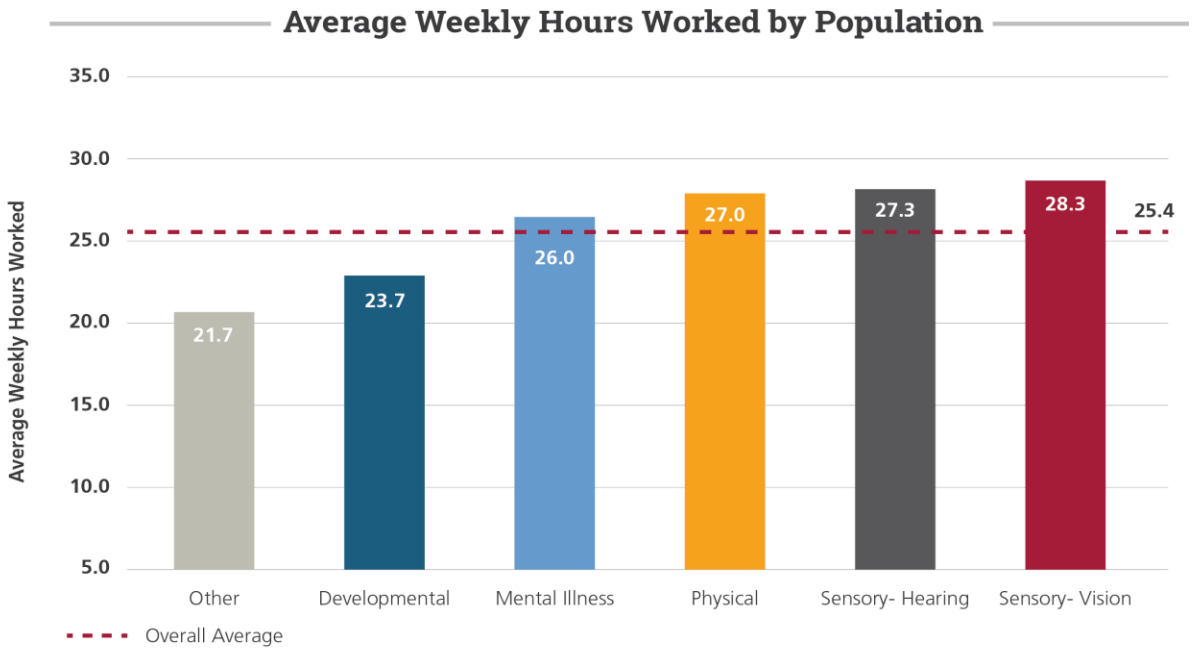
Severity of Disability	Average Hourly Wages
Non-Significant Disability	$ 9.81
Significant Disability	$ 9.46
Most Significant Disability	$ 8.69

FIGURE 11

WEEKLY HOURS WORKED

Figure 12 displays the average weekly hours worked by population. The number of unique ESM cases identified with weekly hours worked is 1,470. The population with the highest average weekly hours worked is Sensory-Vision, at 28.3 hours per week, and the population with the lowest is Other, at 21.7 hours per week. The overall average is 25.4 weekly hours worked.

FIGURE 12



These findings are consistent with those of previous reports, with categories of Developmental and Other receiving the lowest weekly hours on average, and Sensory-Hearing receiving the highest weekly hours worked. The average weekly hours worked rose for each population.

LENGTH OF TIME FROM FIRST AUTHORIZATION TO EMPLOYMENT PLACEMENT

FIGURE 13

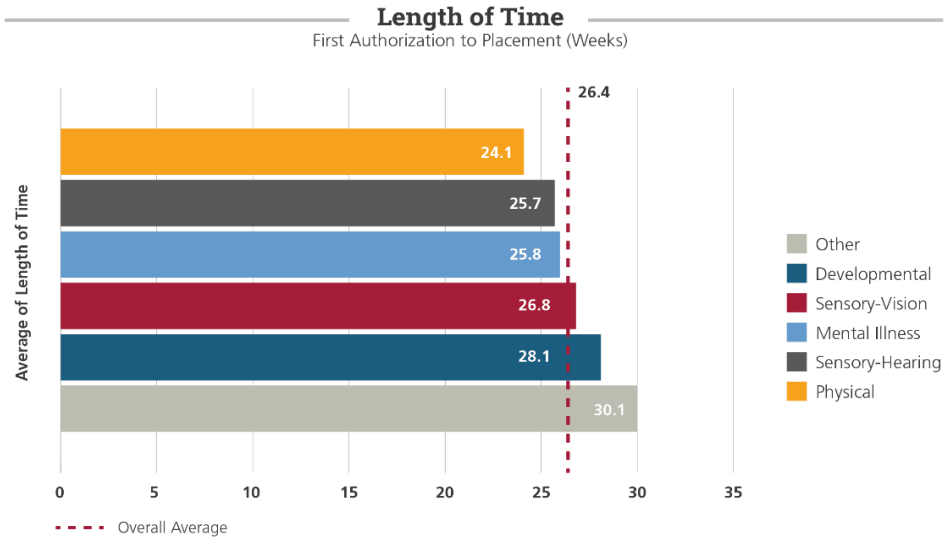


Figure 13 displays the data for the average length of time from a consumer's first authorization to the date of employment placement, in weeks. The population that achieved the shortest timeframe from first authorization to

employment placement is Physical, at 24.1 weeks, and the population with the longest timeframe is Other at 30.1 weeks. The average length across all ESM consumers is 26.4 weeks.

These findings differ slightly from the November 2016 quarterly report findings, which found that the longest timeframe from first authorization to employment placement was for the category Developmental, and the population with the least length in time was those categorized as Other. Overall, the length in time increased for each population by an average of 10 weeks, which is a positive trend we hope to see more of, in line with the expectations under ESM which emphasizes quality and individualization over speed in achieving ESM milestones.

SUCCESSFUL CASE CLOSURE RATE

Figure 14 shows the number of cases that received both an employment placement *and* 90-day stabilization. The case closure rates reflect the proportion of closed cases that received a "Successful Case Closure" designation, compared to other closure designations. Of all ESM consumers, 1,676 received a case closure code. 631 of those closure codes are categorized as a successful case closure. A majority of the successful case closures, 71%, are categorized as the population Other. The population with the least number of successful case closures is Sensory-Vision, at 34%. The overall average of successful case closures is 38%.

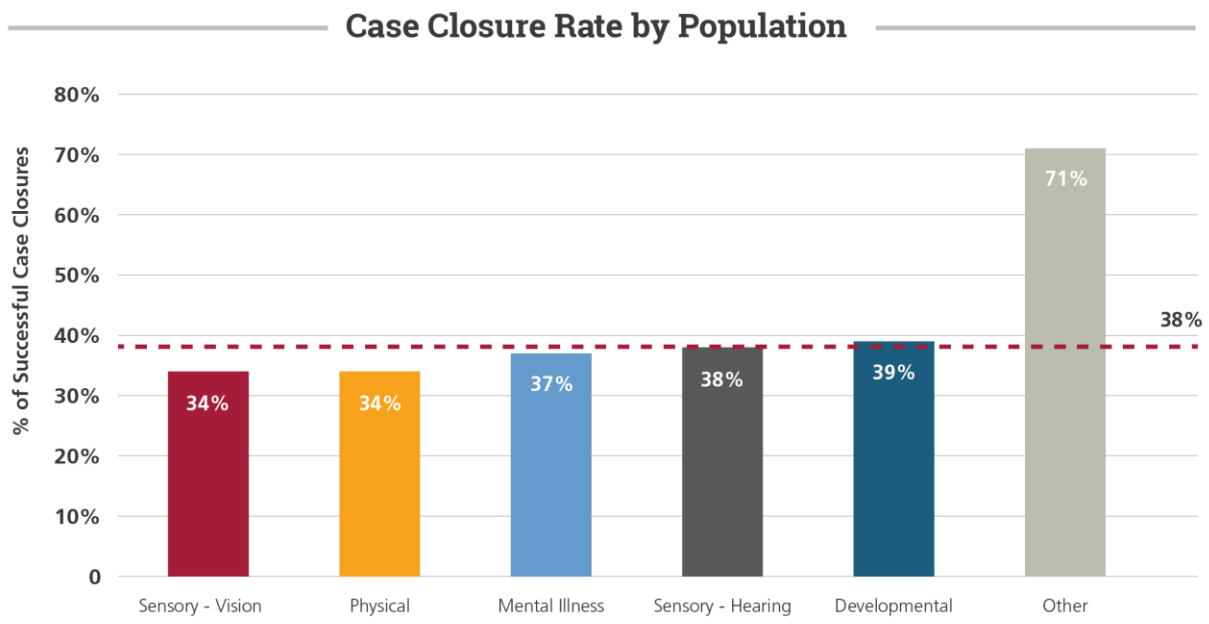


FIGURE 14

The overall percentage of successful case closures, as well as the individual averages by population, is lower than in the previous quarterly report. This could be attributed to having a larger sample size than in previous reports because there are more individuals being served under ESM. Those with a developmental disability previously achieved the lowest case closure rate. However, the data currently reflects Sensory-Vision and Physical as having the lowest case closure rate at 34%.

DISCOVERY HOURS COMPARISON

Figure 15 represents the average number of hours an ESM consumer spends in the discovery phase by population. The population with the highest number of discovery service hours are those categorized as Other, at 26.9 hours.

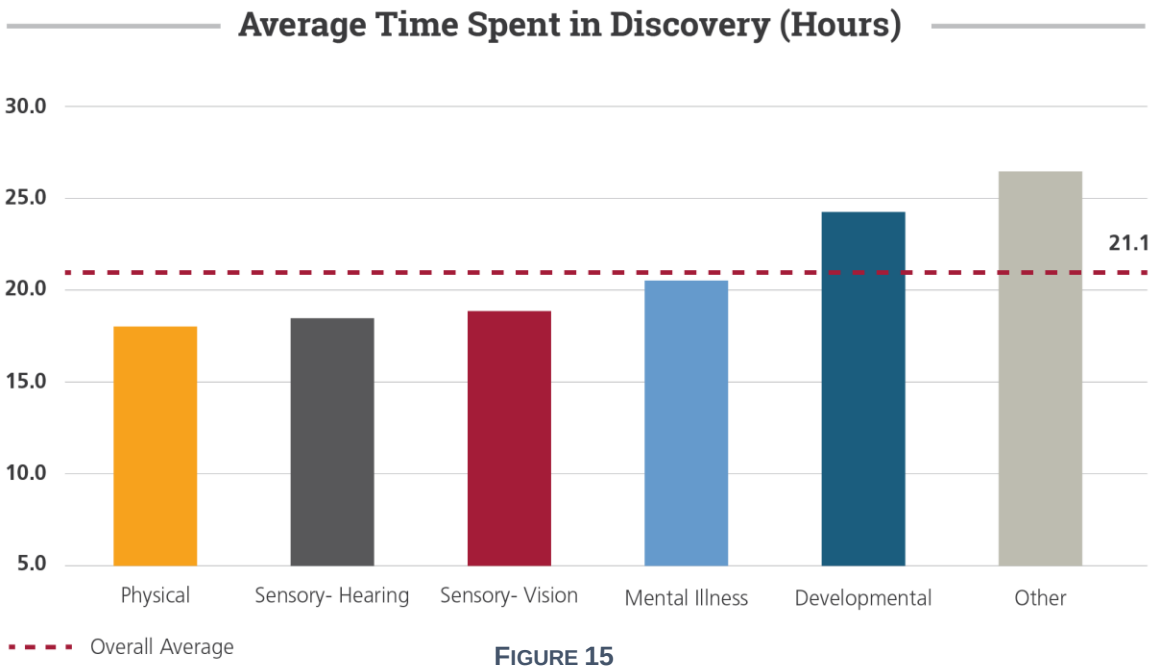


FIGURE 15

The population with the least number of discovery service hours is Physical, with 17.4 hours.

These results reflect an increase in average time spent in discovery, as compared to the previous quarterly report. The average time spent in discovery increased across all populations, substantially, and the overall average doubled, up from 9.4 hours in our last quarterly report to 21.1 hours.

INDUSTRY PLACEMENT

Industry Placement by Job Function

BRS uses O*NET federal job codes to designate a consumer's employment placement. These job codes correspond to a "Job Family" category. A Job Family is composed of different occupations that require similar skills and expertise. In other words, a Job Family is grouped by job functions. Categorizing consumer employment placements by job functions allows for an easy analysis across multiple industries. For the sake of clarity, any reference to "category" in the remainder of this section will refer directly to the Job Families found in O*NET.

#	Job Family by Function	Percentage of BRS Placements
1	Production	24.0%
2	Office and Administrative Support	15.9%
3	Food Preparation and Serving Related	14.6%
4	Transportation and Material Moving	12.1%
5	Building and Grounds Cleaning and Maintenance	10.3%
6	Sales and Related	6.2%
7	Personal Care and Service	5.0%
8	Healthcare Support;	2.2%
9	Community and Social Service	1.6%
10	Installation, Maintenance, and Repair	1.5%

FIGURE 16

1,490 unique cases were identified with a federal job code. Federal job codes correlate to a Job Family categorization based on their employment placement. **Figure 16** displays the top 10 job families ranked by the percent of ESM consumers placed in each category. The categories with the largest percentage of consumer placements in ESM are as follows:

- **Production**,
- **Office and Administrative Support**, and
- **Food Preparation and Serving Related**.

In 2015, the estimated number of employment opportunities for Production-related jobs occupations in Indiana was 377,510. Similarly, the number of employment opportunities for Office and Administrative Support was 406,130, and 277,960 for Food Preparation and Serving jobs[8].

Since July 1, 2015, 357 consumers have been placed in occupations designated in the "Production" category. Many of these consumers achieved the job title of "Helpers-Production Workers". Production workers perform activities such as supplying or holding materials or tools, cleaning work area or equipment, examining products for quality assurance, and starting equipment[9]. The skills required are minimal, although some occupations may require knowledge of mechanical concepts (maintenance, machines, tools), or some technology. Educational requirements for occupations in this Job Family typically require a high school diploma [10]. Nationally, the average wage for Production Worker occupations is $13.44 hourly, and in the state of Indiana, the average is slightly higher at $16.65. The ESM data reflected an average wage of $9.22 for this category.

[8] OES Dashboard
[9] Details Report for: Helpers- Production Workers
[10] Summary Report for: Helpers-Production Workers

Projected growth (2014-2024) for Production Worker occupations is expected to see a 4% decline nationally, but is expected to increase in the state of Indiana by 8%.[11]

The second largest Job Family, with 237 consumer placements, is "Office and Administrative support". An example of a job title received by a consumer is "Office and Administrative Support Workers, All Other". Other consumers in this job category find employment in occupations such as Stock Clerks, Customer Service Representatives, Receptionists and Information Clerks, and Hotel, Motel, and Resort Desk Clerks. The skills required for these jobs include clerical and administrative duties, and often require moderate on-the-job training [12]. Educational expectations are high school diploma, though some college education is required for certain job titles. The average wage nationally is $15.67, and $14.45 in the state of Indiana[13]. The ESM data reflected an average wage of $10.71 for this category. Projected growth for Office and Administrative Support occupations is expected to be at 7% nationally and 8% in Indiana[14].

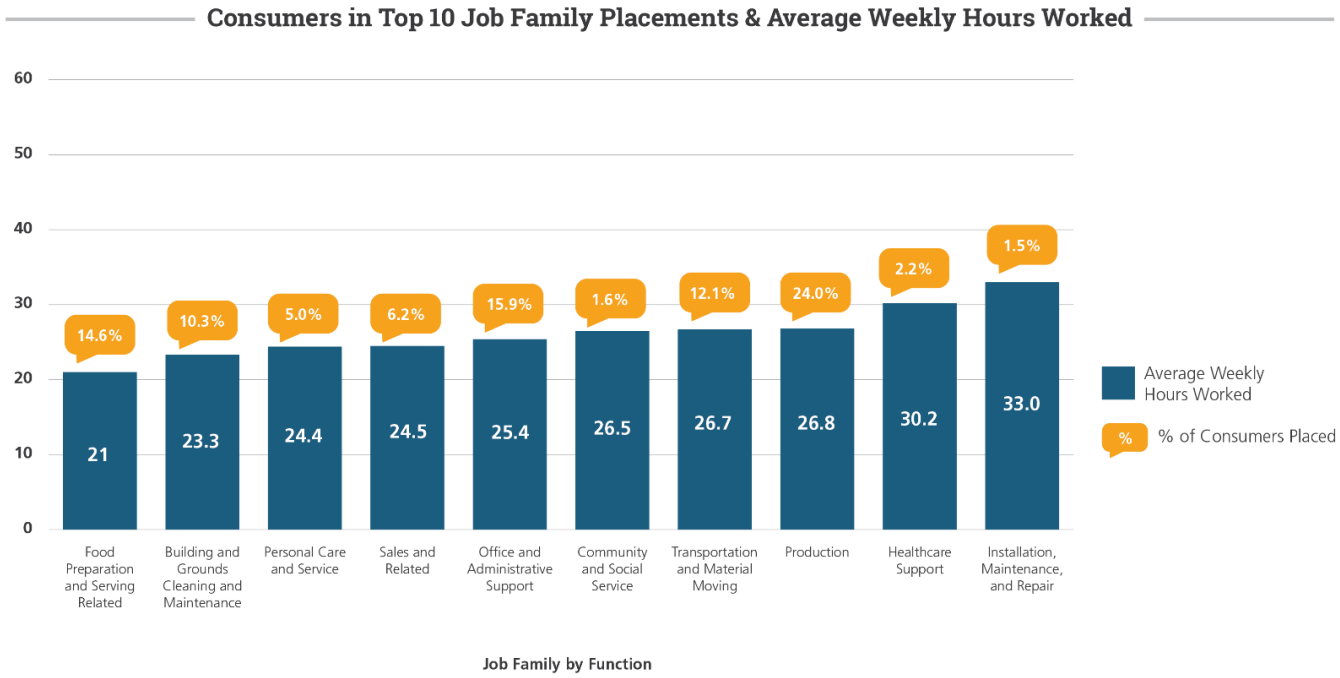
The third largest category that consumers were placed in is "Food Preparation and Serving Related" Job Family, with 218 consumer placements. Most consumers received a "Food Server, Non-restaurant" job title. Activities that are typically performed under this Job Family include serving food to individuals outside of a restaurant environment, such as hotels and residential care facilities, and often have occupations such as "Dietary Assistant", "Food Service Worker" and "Room Service Server". [15] The skills required include active listening, speaking, service orientation and monitoring/assessing to make improvements or take corrective action[16]. The educational requirements to obtain a job in this category include less than high school diploma to some college[17]. The average wage nationally for occupations in this Job Family is $9.80 hourly, and $8.85 in Indiana[18]. The ESM data reflected an average wage of $8.35 for this category. Furthermore, career growth is expected to be at 13% nationally, and 16% in Indiana between 2014 and 2024. [19]

Figure 17 below compares two data points: **Average Weekly Hours Worked** and **Percent of Consumers Placed by Job Family**. The three job families that comprise the most percentage of ESM consumer placements are *Production, Office and Administrative Support*, and *Food Preparation and Serving Related*. Consumers working in jobs in the *Production* category received the third highest average weekly hours worked, preceded by *Healthcare Support* and *Installation, Maintenance, and Repair* respectively.

These findings are similar to those of the November 2016 quarterly report, where the top three largest job families remaining unchanged. The top ten job placements for VR consumers are also the same as the previous quarterly report, with the addition of *Installation, Maintenance, and Repair* job family.

[11] Salary Finder: Production Workers, All Other
[12] U.S. Department of Labor
[13] Salary Finder: Office and Administrative Support Workers, All Other
[14] Occupational Profile: Office and Administrative Support Workers, All Other
[15] Summary Report for: Food Servers, Non-restaurant
[16] Skills Summary
[17] Summary Report for: Food Servers, Non-restaurant
[18] Salary Finder
[19] Occupation Profile

FIGURE 17



SUPPORTED EMPLOYMENT

Supported Employment is a support service intended to support an individual with a most significant disability achieve employment stabilization. Supported Employment is authorized for consumers with the most significant disabilities and is authorized on an hourly basis to offer additional support in order to reach stabilization and job retention[20]. Many of these consumers have either had past employment opportunities interrupted by their disability, or traditional employment has not occurred at all.

In recent years, there was nothing in place to deter providers from quickly closing a case after placement in order to receive the final milestone payments. The new ESM helps limit the desire to close out a case quickly by providing financial support to providers serving individuals with highest needs that might need longer to stabilize at their place of employment.

The focus of ESM is on stable, sustainable employment that aligns with the needs of consumers. Supported Employment deployed through authorizations that are compensated on an hourly basis ensures that employment is stable and meets the needs of consumers, offering consumers adequate support in their employment journey, and also incentivizes employment consultants to work with consumers as long as they need. This service allows consumers to receive support after achieving employment placement, for up to 24 months. Supported Employment services may be provided on-site or off-site, or a combination[21], and are expected to "fade", or lessen, as consumers work towards stabilization.

Even while BRS continues to set aside funds specifically for Supported Employment, the service has been historically underutilized. As a result of this finding, VR counselors have been encouraged to routinely authorize

[20] http://www.in.gov/fssa/files/VRS-Manual%20of%20Employment%20Services%20Revised%20September%202016.pdf
[21] http://www.in.gov/fssa/files/ES_Round_2_training.pdf

Supported Employment as soon as a consumer with a most significant disability gains employment. In addition, BRS has provided multiple training opportunities for providers, through webinars and various other methods, to specifically leverage Supported Employment services more often. The following paragraphs explore trends in the authorizations of Supported Employment services, through an eighteen-month period beginning in July of 2015 through December 2016. The data discussed below only includes consumer cases that received their earliest authorization on or after 7/1/2015, which is a parameter that aligns with all of the other ESM data analysis in the quarterly report.

Supported Employment Hours Authorized Per Unique Case

Figure 18 displays the Supported Employment authorizations by month. November 2016 has the highest total hours of Supported Employment authorizations, at 3,682.3 hours. The month with the least number of Supported Employment authorizations is October of 2015, at 15 hours, followed by August 2015 at 25.3 hours, and July 2015 at 34 hours.

In December 2015, there is a noticeable and continuous increase in the average number of authorized Supported Employment hours. This is around the time that BRS performed additional trainings for providers and counselors about the value of Supported Employment, and simplified the funding structure, moving from a tiered approach to an hourly approach. The data shows that this intervention achieved its intended impact of increasing the use of Supported Employment services by providers.

The total Supported Employment hours authorized per month shows the progress that BRS has made with encouraging providers to leverage this valuable service. Since ESM was only implemented in July 2015 – and these results are only for ESM consumers – it is expected that the average number of Supported Employment hours in the initial months are low. However, as the data shows, over time more providers are leveraging Supported Employment resulting in an increase in average authorized hours.

FIGURE 18

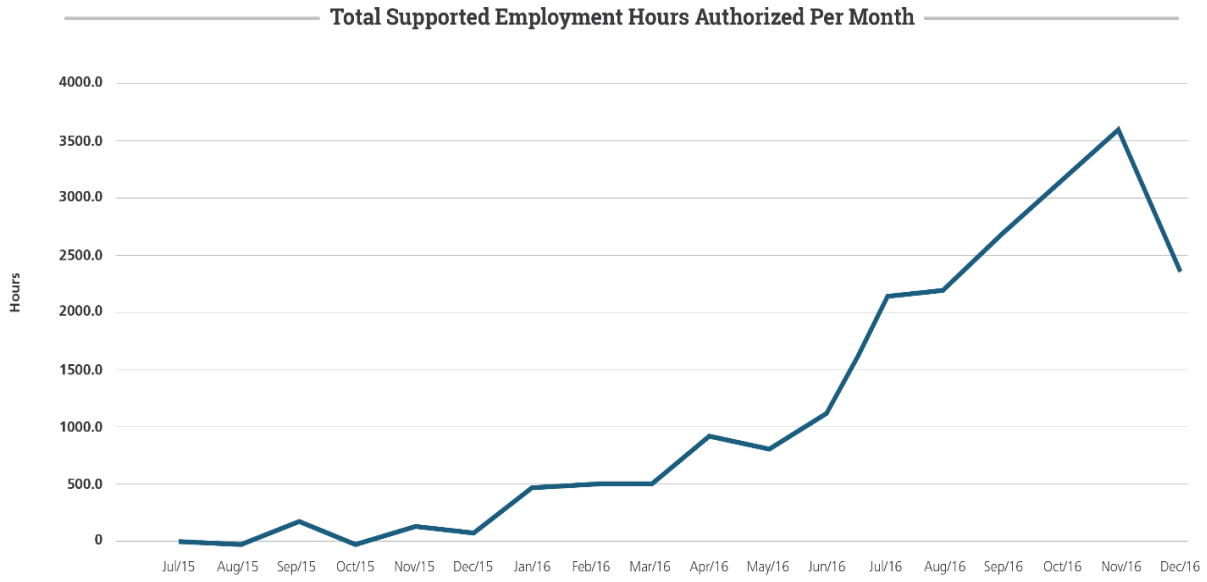
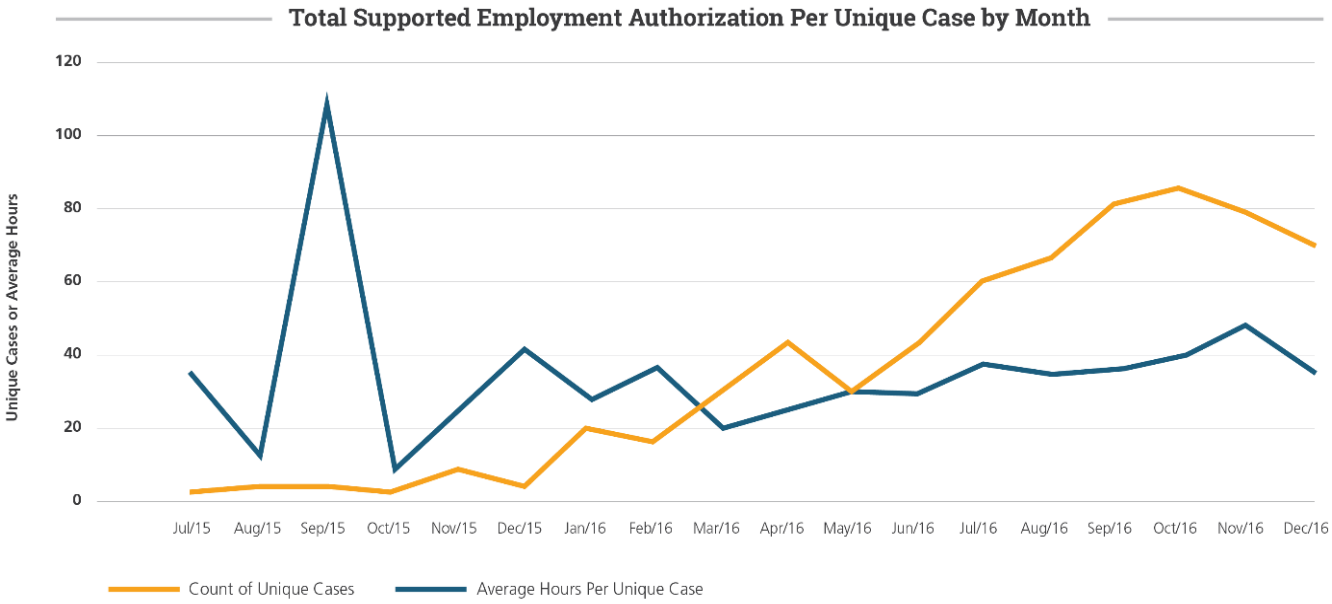


FIGURE 19



The double line graph above, **Figure 19**, shows the average Supported Employment authorizations per unique case, by month. There is a visible increase in total Supported Employment hours authorized per unique case in September 2015, which is due to a single consumer with a significant disability who received 196.5 total hours of Supported Employment that month. As this was only one of two cases that received Supported Employment during this month, the average hours was much higher than any other month.

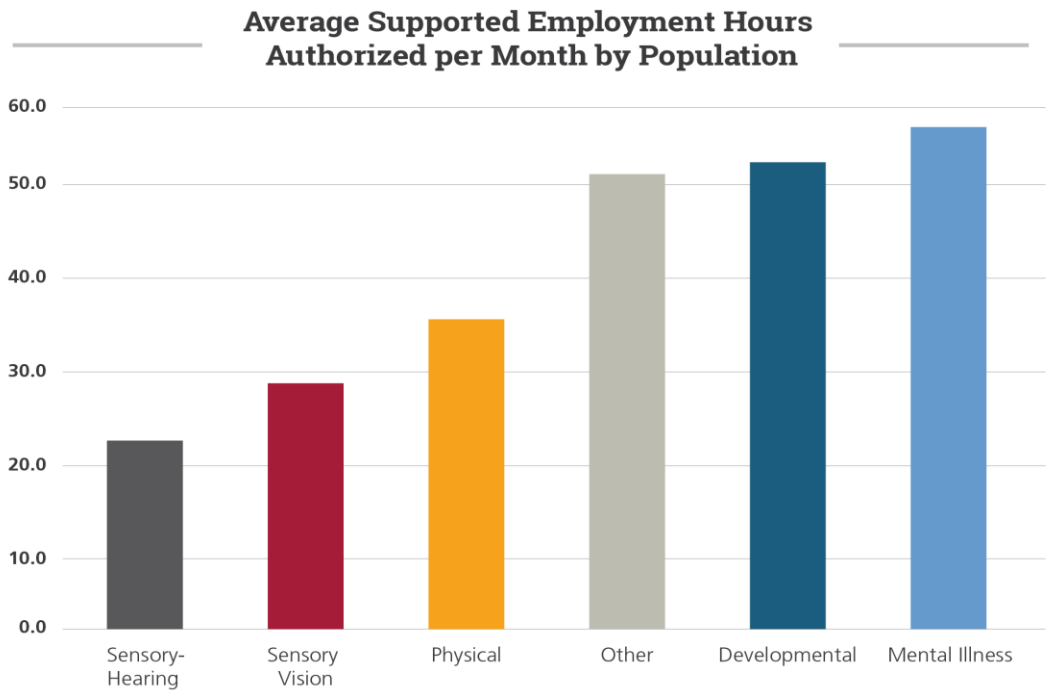
Three months of Supported Employment services is the average length of time each ESM case receives. The line graph shows the average number of Supported Employment authorization hours is increasing, which we would naturally expect an increase in the overall average as the utilization is increasing.

Total Supported Employment Hours Authorized by Population

422 unique cases received authorizations for Supported Employment hours over the eighteen-month period. The average number of Supported Employment hours authorized per case is 103.4. Approximately 53 out of 700 unique cases received an authorization of 100 hours or over of Supported Employment. The remaining 367 received anywhere between 2 and 99 hours, with the average of those 367 unique cases being 34.4 authorized hours of Supported Employment.

Figure 20 outlines the average hours per month, by disability category. The results reveal that the population that receives the highest average Supported Employment hour authorizations are those categorized as having a Mental Illness, at an average of 56.1 Supported Employment hours authorized per case. Coming in slightly lower at 52.5 hours are those categorized as having a Developmental disability. The population receiving the least Supported Employment hours on average is Sensory-Hearing, with 23.4 total Supported Employment hours authorized per case on average.

FIGURE 20



Total Supported Employment Hours Authorized by Area

The heat map on the following page illustrates the authorized Supported Employment hours by area. Indiana has 22 regional VR offices across four distinct regions. The data analyzed represents the total number of Supported Employment hours authorized in each area, per case, over the 18-month period. The area that authorized the highest number of Supported Employment hours is Area 4, at 2,728.1 hours authorized. The total number of cases in the area is 54, which is an average of 50.5 hours per case. The area with the least number of Supported Employment hours authorized is area 8, at 141.8 hours over the 18th month period analyzed. Area 8 had 8 unique cases that received Supported Employment authorizations, which brings it to 17.7 hours per case on average.

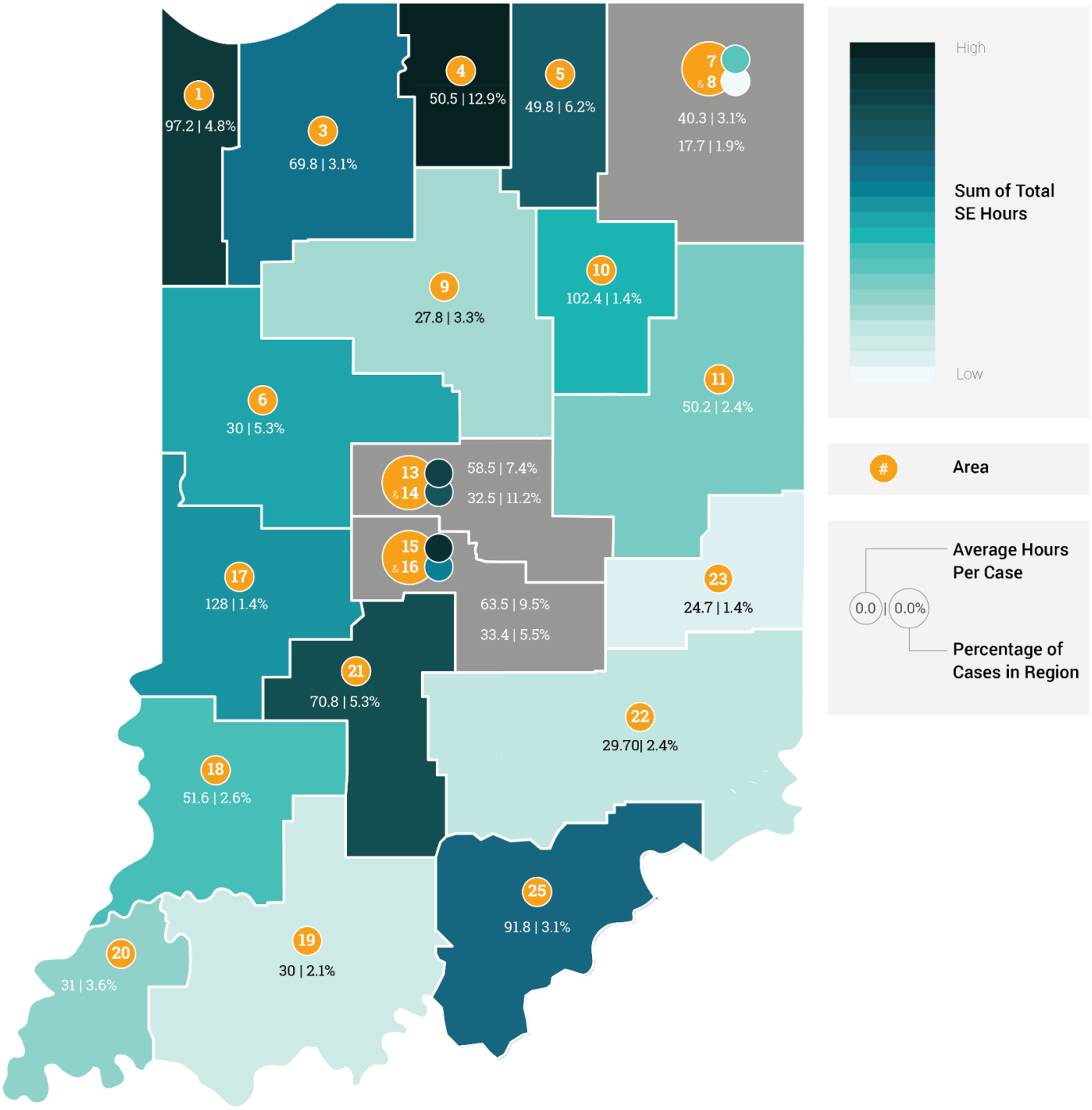


FIGURE 21

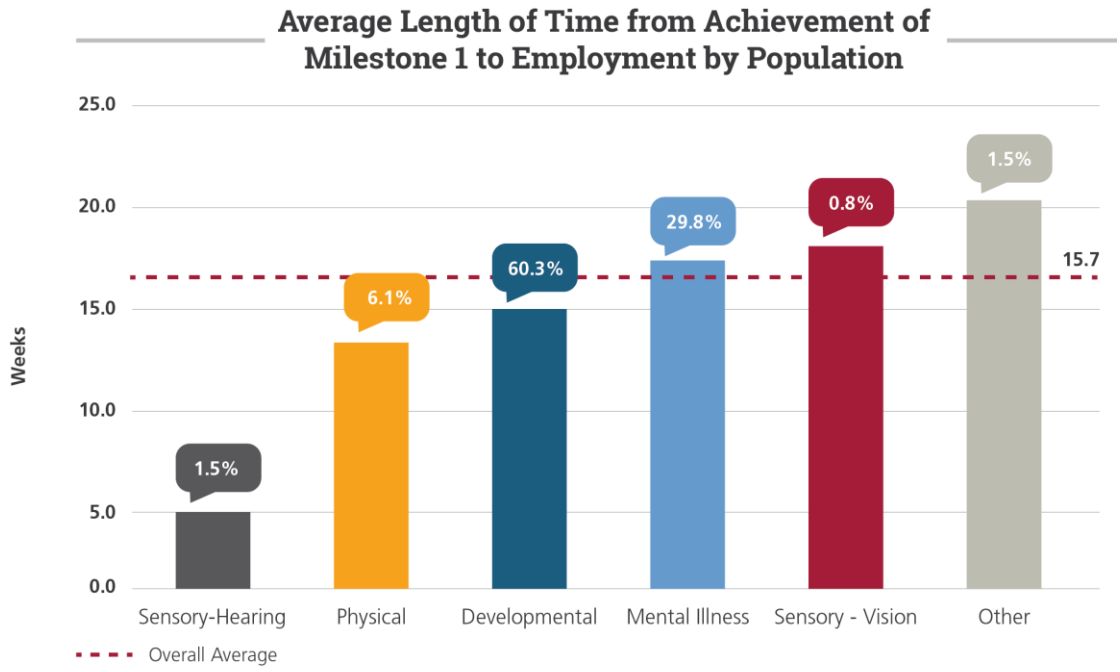
Some areas on the map display what appears to be very low utilization of Supported Employment hourly authorizations, which may indicate that additional training is necessary to ensure VR and provider staff understand how and when Supported Employment should be provided. Since this analysis only includes 18 months of Supported Employment authorizations, more time needs to pass in order for the sample size to increase. A larger sample size means more accurate and reliable metrics. As time passes and more data is collected, the overall number of cases receiving Supported Employment are expected to increase, which should normalize the data results.

LENGTH OF TIME FROM ACHIEVING MILESTONE 1 TO EMPLOYMENT PLACEMENT

Following data in **Figure 22** measures the length of time it takes Supported Employment cases from completing the discovery phase (Milestone 1) to gaining an employment placement. The timeframe is measured in weeks and only includes ESM cases that received a Supported Employment authorization.

The total number of cases that achieved Milestone 1 is 131. Most of the consumer cases are those categorized as having a Developmental disability, and the fewest cases are those categorized as having a Sensory-Vision impairment. The population with the longest length of time between achievement of Milestone 1 and employment placement is those categorized as having Other impairments, who experienced on average 23.6 weeks between Milestone 1 and employment. The population with the shortest time from these two dates is Sensory-Hearing, at 5 weeks on average between those two dates.

FIGURE 22



V. KEY OBSERVATIONS

As VR services continue to be authorized under ESM, the data set will grow and reveal broader trends and patterns. For now, key observations will drive future analyses and reveal questions for further consideration.

- **Supported Employment utilization is still low, but increasing steadily.**

The data shows that although Supported Employment utilization is still much lower than where BRS expects, there is a clear trend towards increasing use of this hourly service. The Supported Employment webinars, simplified funding structure, best practices, and other training materials have contributed to increasing Supported Employment authorizations. The areas and months that reflect a lower utilization of Supported Employment authorizations can be attributed to many factors, including simply not having enough unique cases of consumers with the most significant disabilities, or capacity challenges with local providers who may lack adequate staff to provide supported employment services. These factors can be further explored in further quarterly reports.

- **Average hourly wages are increasing across almost all populations, and average weekly hours worked rose for all populations.**

Average hourly wages are increasing across all populations, and for those that saw decreases, it was by $0.25 or less. The average hourly wage and weekly hours worked results are similar to what was uncovered in the November quarterly report, including reflecting the highest wages for Sensory-Hearing cases and the lowest for those categorized at having a Developmental disability. Most of the wages went up by an average of $0.13, including the overall average, by $0.05. Average weekly hours worked rose steadily for each population. BRS hopes to see these figures continue to rise, especially for consumers with severe disabilities.

- **Job family placements remain steady.**

Although the hours and wages that consumers receive is increasing, job family placements remain steady. As noted in the November 2016 quarterly report, the occupations where most consumers are placed – Production, Office and Administrative Support, and Food Preparation and Serving Related – all have projected growth between 4% and 8% in the state of Indiana. Further, Food Preparation and Serving Related jobs are expected to grow at 16% in Indiana between 2014 and 2024[22]. One major change is that *Installation, Maintenance, and Repair*, which was a new job family in the top 10 job placements ranking, has on average over 30 hours a week for consumers placed in jobs in this job family, which is higher than the average weekly hours worked of 25.4. This represents a positive change that we hope to see more of as we continue monitoring the data regarding employment placements.

[22] Occupation Profile

V. FUTURE ANALYSES

This report is one installment in a series of program evaluation reports to be produced quarterly by Public Consulting Group in partnership with BRS. As each report builds off its predecessor, BRS will identify areas for further exploration. Based on the key observations to date, the following areas should be considered for future analyses:

- **Trends and patterns over time –** Since ESM was only recently implemented, there are limited data points available for analysis. However, over time the data collected from the ESM model will grow and allow for analyses specifically looking at trends and data patterns. Are more people receiving BRS services than in the past, or is that number decreasing? Are certain metrics (average hourly wages, weekly hours worked, case closure rate, etc.) changing for populations over time? These are just a few questions that could be answered in future reports.

- **Consumer Job Placements –** One key indicator of consumer placement is the wages and industry they are placed in, as well as the quality of the placement. Closely monitoring trends in wages (are they increasing, decreasing, or remaining steady?), industry placements (are consumers being placed in industries that are expected to grow in the coming years or see substantial decreases?), and hours worked (are consumers being placed in jobs with lower hours on average, or even seasonally impacted jobs?) are all themes that these reports will aim to monitor and analyze.

- **Provider Characteristics** – Another key area for future analysis is features of the VR providers. This includes examining data such as the employers that the provider works with, the number of clients that they are serving, and the percentage of case closures that are categorized as “Successful”, among many other things. Other characteristics of providers, including location (urban v. rural), access to public transportation, and staff training are all possible areas for analysis that have the potential to inform our understanding of how BRS can better serve consumers. All of these are important in understanding the consumer experience and ultimately how to better serve consumers.

APPENDIX A – CITATIONS

Details Report for: Helpers- Production Workers (n.d). In *O*NET OnLine.* Retrieved from http://www.onetonline.org/link/details/51-9198.00#Credentials

"Indiana Vocational Rehabilitation Services Manual of Employment Services." (2015): n. pag. Http://www.in.gov/fssa/files/VR_Manual_of_Employment_Services_June_2015_FINAL.pdf. Web.

“Indiana Vocational Rehabilitation Services Manual of Employment Services”. (2016): n, page. http://www.in.gov/fssa/files/VRS-Manual%20of%20Employment%20Services%20Revised%20September%202016.pdf. Web.

Occupational Profile: Office and Administrative Support Workers, All Other (n.d). In *Career Onestop.* Retrieved from https://www.careerinfonet.org/occ_rep.asp?optstatus=001000000&soccode=439199&id=1&nodeid=2&stfips=18&search=Go#SectionOp3

Occupation Profile (n.d). In *Career Onestop.* Retrieved from https://www.careerinfonet.org/occ_rep.asp?optstatus

OES Dashboard. (2015). *2015 Estimated Employment for Indiana*. Available from http://www.hoosierdata.in.gov/infographics/oes-dashboard.asp

Salary Finder (n.d). In *Career Onestop.* Retrieved from https://www.careeronestop.org/toolkit/wages/find-salary.aspx?soccode=359099&location=Indiana&dataview=&hourly=true&national=False

Salary Finder: Office and Administrative Support Workers, All Other (n.d). In *Career Onestop.* Retrieved from https://www.careeronestop.org/toolkit/wages/find-salary.aspx?soccode=439199&location=Indiana&dataview=&hourly=true&national=False

Salary Finder: Production Workers, All Other (n.d): In *Career Onestop*. Retrieved from https://www.careeronestop.org/toolkit/wages/find-salary.aspx?soccode=519199&location=Indiana#ctl29_pnlTitle

Skills Summary (n.d). In O*NET OnLine. Retrieved from http://www.onetonline.org/link/summary/35-3041.00#Skills

Summary Report for: Food Servers, Nonrestaurant (n.d). In *O*NET OnLine.* Retrieved from http://www.onetonline.org/link/summary/35-3041.00

Summary Report for: Helpers-Production Workers (n.d). In *O*NET OnLine.* Retrieved from http://www.onetonline.org/link/summary/51-9198.00

U.S. Department of Labor, Bureau of Labor Statistics. (2016). Librarians. *Office and Administrative Support Occupations.* Retrieved from http://www.bls.gov/ooh/office-and-administrative-support/home.htm

U.S. Department of Labor, Bureau of Labor Statistics. (2016). Librarians. *Bill and Account Collectors.* Retrieved from http://www.bls.gov/ooh/office-and-administrative-support/bill-and-account-collectors.htm

www.publicconsultinggroup.com